CAA Air Traffic Control Assumes Jurisdiction Over 39 Towers

UNIVERSITY 9 1941 LOUISVILLE

THE AIR LINE PILOT

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TWA Contract Amendments Completed—UAL's Unchanged

—Wide World Photo

OPTIMISTIC **Mayor Fiorello (Little Flower) A. La Guardia heaves the first shovelful of dirt into the hungry jaws of a huge steam shovel during the ground-breaking ceremonies for the $500,000 American Export Airlines' seaplane hangar, which is being erected at the marine base of the La Guardia airport. In a speech, the Mayor optimistically expressed the opinion that World War II now raging in Europe and elsewhere would be over by the time this hangar is completed in March, 1942. We certainly hope you are right, Fiorello, but pardon us if we appear to have doubts.**

Administration to Have Full Power

The first step toward federal control of air traffic at municipally owned airports on civil airways was taken when it was announced that the Civil Aeronautics Administration would assume jurisdiction over air traffic activities at 39 airports where both civil and military flights operate.

Action followed recommendation by the Inter-Departmental Committee on Air Traffic Control, and is understood to be agreeable to the War Department. In fact, CAA officials disclosed recently that the Air Corps itself asked that CAA take over the 39 traffic control towers listed.

$1,000,000 to Cover Expenses

CAA is provided with $1,000,000 from the Army supply bill to cover expenses of installing additional equipment at these fields and training control tower person-

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Record Traffic at Chicago Airport

The Chicago Airport set a record in plane traffic with the arrival and departure of 74,501 passengers in June.

Based on past figures, an estimate of 250,000 outgoing passengers by September of 1950 has been made by experts, who say those figures are conservative.

John A. Casey, Superintendent of the Municipal Airport, pointed out that the great increase in passengers will not mean a proportionate increase in the number of plane arrivals and departures. There were 5,411 plane arrivals and departures in June, another record.

"Every year the ships get bigger," he said, "and accommodate a greater number of passengers. It's my guess that in ten years from now there may not be many more schedules flown than there are today. Whatever happens, Chicago has an airport that will answer its needs for 20 years."

Casey noted that this airport, described as the world's largest, presents quite a contrast from the neglected field with a single cinder runway and one hangar in 1927.

He said the next thing Chicago needs "in an air way" is a new terminal at the airport; second, some speedy means of getting air passengers to and from the Loop; and, third, a Loop terminal.

Pilots' Agreements Evidence Worth

Several years ago there were no working agreements in existence between the carriers and the pilots. No agreements of this character had ever been written or negotiated. In the writing and negotiating of these first pioneer contracts, all concerned realized that they were facing a task of immense proportions, with countless involvements and various ramifications.

Good and Bad Agreements

Today the makers of all these agreements, 15 in all, with one still left to go on National Airlines, are justly proud of their accomplishments. Employment contracts, the same as anything else, are divided into two categories—good and bad. It is common knowledge that a bad agreement often

(Continued on Page 3, Col. 4)

Certified Pilots Double in Year

There are now twice as many civil airplane pilots in the United States as there were last year.

In one year the number of certificated airplane pilots has increased by 100.6 per cent, and licensed planes have increased 58.7 per cent, according to figures released up to the end of the fiscal year, July 1, by Brig.-Gen. Donald H. Connolly, Civil Aeronautics Administrator.

There were 41,006 pilots on July 1, 1940. Today there are 82,277. This great increase is mostly due to the pilot training program of the CAA, which is continuing its "mass production of pilots" with a class of 12,000 now studying in the summer session of its 1942 program. During the year this program will produce about 37,000 more civilian pilots.

In six states, Arkansas, Kansas, Mississippi, New Mexico, North Dakota, and Utah, the number of pilots increased more than 200 per cent during the year, and in 33 states the number more than doubled. California now leads with 9,965 pilots, and then comes New York, 5,765; Texas, 5,493; Pennsylvania, 4,109; and Illinois, 3,838.

There is a new high in certificated planes, exclusive of military planes of all types, with a total of 22,025 now listed as against 13,878 a year ago.

LATE NEWS IN BRIEF

Wanted

Slim Faucett of Faucett Airways in Lima, Peru, advises the Association that he is badly in need of pilots—air line, broken-down, or otherwise—since most of his have departed for the bigger money in ferrying service and instructing in Canada. His ships are huge, single-engine craft, and his wages are around $400 or $500.

Sued

The State of Virginia refunds the 5¢ a gallon tax to persons who do not use their gasoline on public highways in motor vehicles. However, a special tax of 3¢ a gallon is charged to air lines operating as carriers within the state. American Airlines is suing the State for a refund of $6,224.76 in taxes on the grounds that its flights are not subject to the 3¢ a gallon tax because the flights are not completed in Virginia.

30,000 Miles

A 30,000-mile printing telegraph network soon will connect the Army, Navy, Weather Bureau, and 175 major airports, the Western Union Telegraph Company has announced. In defense or other emergencies the network will transmit messages direct from Washington and other control points.

(Continued on Page 4, Col. 1)

LaGuardia Warns Against Stripping

Mayor La Guardia, a participant in the ground-breaking ceremonies for the $500,000 seaplane hangar to be erected at the marine terminal at La Guardia Field for American Export Airlines, told the attending group that in spite of his deep anxiety to see all

(Continued on Page 3, Col. 5)

A. F. OF L. CHARTERS DISPATCHERS

A Federal Labor Union Charter of affiliation has been issued to the Air Line Dispatchers Association by the American Federation of Labor. This is the only A. F. of L. charter issued to an organized group in the air line industry with the exception of the Air Line Pilots Association.

The dispatchers' organization put up a long hard fight, which dates back about two years, to obtain their charter. Obviously they are proud of the success they have attained which their new charter so amply reflects.

The president of the Air Line Dispatchers Association is L. M. Kuhnley of Seattle, Wash. Their home office at the present time is located in Seattle at 1203 Vale Street.

ALPA is glad to welcome the Air Line Dispatchers Association as a brother affiliate under the banner of the American Federation of Labor. All air line pilots extend hearty congratulations to this new A. F. of L. chartered group.

12-Cylinder Ford Engine Tested

One year after blueprints were drafted, tests were commenced on a 12-cylinder, liquid-cooled, solid-fuel injection airplane engine manufactured by the Ford Motor Company.

It will require several months before tests will be completed, President Edsel Ford said. Company engineers are hopeful that the engine will produce 1,800 horsepower at take-off. Preliminary tests on a two-cylinder section of the engine have been described as encouraging.

The Ford V-12 engine could easily be adapted to quantity production at the huge River Rouge plant, if approval of the engine is received from the Army Air Corps.

FREIGHT ***Shuttling between Douglas Aircraft Company's plant here, and air bases throughout the country, Army transport planes are speeding special parts for America's aerial weapons. Fast and powerful military transports of the type shown are being delivered by Douglas in large numbers to the Army and Navy for use as cargo and troop carriers. The vital need for these planes in modern military strategy has repeatedly been demonstrated by war events abroad. Such transports in commercial versions, Douglas DC-3's, are in use by all leading air lines. They comprise a second line of air defense, for in addition to maintaining swift and efficient communications and transportation, they could be quickly and easily converted to actual military purposes.***

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"Public Safety calls for pilots of high character and great skill. The occupation is a hazardous one. Therefore, the law should provide for a method to fix maximum flying hours, minimum pay and a system for retirement or annuity benefits."

—President Roosevelt.

PROVISIONAL

The term *provisional* is appearing increasingly frequent in air lines' regulations and operating procedures. In certain rather isolated instances, it is impossible to get away from the use or intent of the word *provisional* when drafting regulations, laws, or operating procedures, but basically, it is a very wrong trend.

Extensive use of the word *provisional* when drafting regulations, laws, or any rules of procedure is obviously a lazy man's way of going about it. Writings of this kind should be brief, clean-cut, and say exactly what is meant. Lawyers often tell the average citizen that it is impossible to do this. It is agreed that it is impossible if a writer is so unskilled with the usage of words that he can't choose from the 600,000 available English words the ones necessary to reflect the true meaning desired so that it can be readily understood.

Provisional terminology should be kept out of Civil Air Regulations and air line operating manuals because it is too indefinite and lends itself far too easily to error or misinterpretation, wilfully and otherwise.

Jake once remarked to Andy, "I secured an insurance policy for our taxicab today."

When Andy pressed him about details, Jake said, "It's one of them there new *provisional* policies. Listen, one of the paragraphs says if our car gets hit by a train having 24 cars, exactly at midnight, and I'm headed east at the time of the accident, and I am in second gear, I collect."

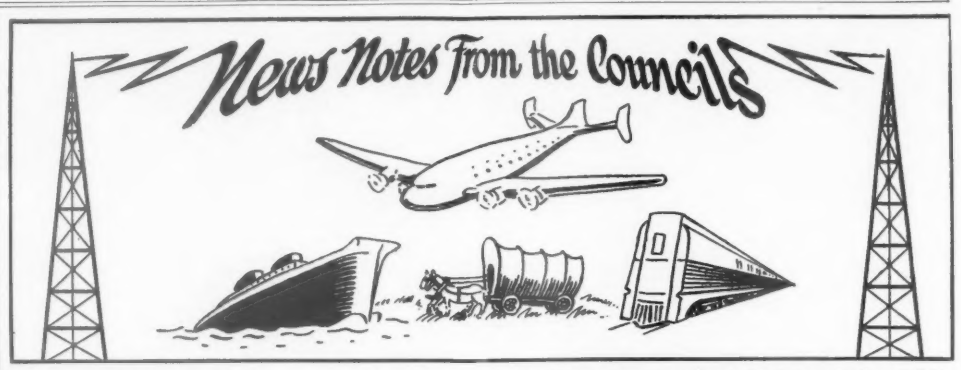
That's a rather humorous and plain description, but it amply reflects the deceptions and obvious innuendoes of the term *provisional.* We often hear of *provisional* loads, *provisional* fields, *provisional* performance characteristics, *provisional* etc., etc., etc.

To make a regulation or law *provisional* injects, right at the beginning, a distinct element of indefiniteness that invariably will result in ineffectiveness. Obviously, this causes such laws and regulations to be practically worthless and, in many instances, they are quite liable to be harmful because they are intended to do something that, because of their very nature, they are incapable of accomplishing. Why not state it in good, old-fashioned, plain English so that everybody will know what he is supposed to do and when, with no if's, and's, nor but's.

ACCOMPLISHMENT

Fifteen working agreements have been completed between the air carriers and the air line pilots covering rates of pay, rules, and working conditions. These agreements were made under Title II of the Railway Labor Act as amended. To receive the full meaning of what all this means it is necessary to reflect on what the pilots' working conditions were only a little more than several years ago. Ask any old-timer. The price in human effort was high. All the newcomers should be anxious to learn from the grizzly veterans of the airways what it's all about.

—David L. Behncke



MY! MY! BUY . . BUY . . BEFORE PRICES GO UP

By C. M. HEFNER
Council No. 19, AA
Ft. Worth, Tex.

Congratulations to our contract committee who recently came out of the last huddle with the company with an expense account and a flat speed bracket for DC-3's that will help 95 per cent of our pilots. The expense allowance away from home is particularly helpful to the wives. Now they won't have to be digging into the grocery money every time Oscar has to make a trip.

Such increases came none too soon. If you don't think all of us have taken a cut in salary lately, just add up what you have bought with your money recently. The sad part is that the business of rising prices and inflation has just begun. In addition, the outlook for salaried personnel in the immediate future is not so bright.

Sudden Upheaval Result of Scare Programs

We were due for a rise in prices of certain commodities due to the defense effort, but I believe the sudden upheaval of the entire price structure is the result of the "scare" programs that the merchants have been putting on for the last few months. For instance, you couldn't pick up a paper without every advertisement screaming "Buy . . . Buy . . . Buy . . . Before prices go up." Now they have yelled it so long that the average citizen has become reconciled to the increase, has grabbed hold of his nose, and jumped in. Every time I turn around I run into someone who is buying a new car, a new stove, a new house, new furniture . . . not because they need the items, but because they've been sold on the coming price rise.

When folks rush out and buy things they don't need, then, gentlemen, I say inflation is here. It would be true even if there were no defense effort. But the curtailment of production on civilian commodities adds fuel to the fire and here it goes. Personally, it would please me greatly to see the merchants get caught in their own trap and receive such a limited supply of goods that their gross sales would drop to a new low. They'd be hanging on the wall by their own bootstraps.

Don't Throw in the Sponge

But don't throw in the sponge with regard to the rising cost of living. Prices will come back down just as surely as they have gone up (if we don't go bankrupt). Don't take my word for it. Here is a case history covering 76 years that was given to me by a leading economist and student of price fluctuation. In 1926 one dollar actually purchased a dollar's worth of goods. In 1919, $1.54 would have bought the same goods; in 1904, 66 cents would have been enough. Here is the complete table:

1865	$2.86
1896	.55
1904	.66
1919	1.54
1926	1.00
1932-33	.54
1941	$1.00 up

The recent news of the need for air line pilots in ocean ferrying created the most intense interest in Ft. Worth since Amon Carter moved American Airlines from Dallas to Ft. Worth. A surprising number of the boys indicated their interest in the job, but some

(Continued on Page 6, Col. 4)

Ex-Jawgy Crackah Sends Last Dose

By W. W. OWEN
Council No. 7, EAL
Atlanta, Ga.

Here, to witness, is probably what will be my final newsletter to the Association. It will be final for two reasons.

First, because by the time this bit of chatter reaches the eyes of the reader, I no longer will be a "Jawgy Crackah, Suh," but will be within the reaches of them dern carpetbaggers living in Flushing, N. Y., which I understand is a small suburb of La Garbage Field. And furthermore, by golly, I ain't a'gonna buy the Brooklyn Bridge from any of them fellers up there unless the price suits me.

The second reason why this will be final is that after this application of "Owen tripe," the whole Association will be completely fed up with me and will take the steps necessary for my removal.

Blessed He and Shevents, Transfers, and Promotions

Dear Old AG abounds with news. Weddings, blessed he and shevents, transfers, and promotions have changed the picture a lot. W. I. (Brud) Dothard found his one and only up in Nashville and chased her until she finally caught him. A. R. (Sonny) Seaman took the great step June 12, and on the first bounce landed in New York on June 15. Sonny is getting ready to assume the duties of boss of a DC-3, in addition to his new duties of boss (?) of his new home. So much for the newlyweds.

Lloyd A. (Bring 'em back more dead than alive) Moreau recently fired up a DC-3 and made his first trip, for which congratulations are in order. On his return trip the official reception committee met the ship, and when Lloyd went home he carried his shirttail in his pocket. He now is in New York, and by now such terms as "range control," "Coney Island intersection," and "No. 12 to approach" should be as familiar to him as the crooks and turns in the Bayou down in his native "Noo Orleens."

Totes Mail to Tampa on First Trip

The other day, in a fit of desperation, the Company sent me out on my first trip. Fred Gilbert and I toted the mail down to Tampa. Oh boy, I like that!

New faces in AG among the captains include Howard Buller, who has many interesting stories to tell about ferrying Hudsons; Pat Patrick, one of Atlanta's lost sheep returning to the fold; Captains Miles and Foxworth; and at Birmingham, Captain Rethorst. Welcome to Atlanta and Birmingham, gentlemen.

We have quite a number of newcomers among the copilots. Some are new men and others have been transferred from New York. I must admit I don't know many of their names, but I think they know we are tickled to have 'em with we'uns.

Movie Tests in Peachtree Terrace Aparaments

Albert B. (Cecil B. DeMille) Duke is busy making a full length movie with his new sound camera. All little girls who have aspirations to be movie stars may obtain a test (?) from either Duke or his

(Continued on Page 7, Col. 3)

"To fly West, my friend, is a flight we all must take for a final check."

In Constant Memoriam

Active

Accidental

Adams, John B.—U. A. L.
Anderson, Lloyd—U. A. L.
Andert, Paul A.—U. A. L.
Barron, John M., Jr.—A. A.
Bickford, L. A.—Panagra
Bigelow, Ed.—U. A. L.
Blom, Edwin W.—U. A. L.
Bogen, W. L.—W. A. E.
Bohnet, Frederick L.—T. W. A.
Bolton, Harvey F.—T. W. A.
Bontrager, C. M.—R. A. L.
Borchers, Adrian—P. A. A.
Bowen, J. E.—T. W. A.
Bowen, Lewis L.—B. A.
Brandon, James L.—U. A. L.
Briggs, Francis W.—A. A.
Broughton, D. E.—U. A. L.
Brunk, Paul S.—P. A. A.
Bucher, Charles L.—P. A. A.
Chamberlain, Cassius B.—N. W.
Cohn, Hanley G.—W. A. S.
Cope, Alonzo—Marine Airways
Cox, Floyd—Ludington
Davis, Alfred W.—U. A. L.
Davis, Douglas—E. A. L.
DeCesare, Frank—Panagra
De Cesaro, Joseph G.—U. A. L.
Dietz, Stuart G.—E. A. L.
Dixon, Andrew, Jr.—D. A. L.
Dunn, Stephen—Panagra
Fey, Howard—U. A. L.
Fields, Glenn T.—A. A.
Fuller, Ray E.—A. A.
George, Hal—T. W. A.
Gower, Vernon—D. A. L.
Grover, R. Boyd—U. A. L.
Haid, Arthur A.—N. W.
Hale, S. H.—E. A. L.
Hallgren, W. A.—A. A.
Hill, George W.—A. A.
Holbrook, Clyde M.—A. A.
Holsenbeck, W. M.—P. A. A.
Jamellier, Stanley E.—C. A. L.
Jamieson, W. L.—E. A. L.
Jones, Lloyd E.—U. A. L.
Kelsey, Harold J.—A. A.
Kincanon, Ted N.—A. A.
King, George B.—P. A. A.
Komdat, Albert C.—E. A. L.
Lewis, Harry C.—T. W. A.
Livermore, Joe—N. W.
Lucas, Al—W. A. S.
Lucas, Verne—Ludington
Lynn, John B.—C. & S. A. L.
McMickle, Harold—Panagra
Malick, Forrest E.—U. A. L.
Mamer, Nick B.—N. W.
Marshall, Gerald V.—A. A.
Merrifield, Austin S.—U. A. L.
Montee, Ralph—T. W. A.
Montijo, John G.—V. A. T.
Morgan, Howard R.—T. W. A.
Mossman, Russell C.—C. & S. A. L.
Neff, Harold—U. A. L.
Noe, Earl J.—T. W. A.
Norby, Raymond B.—N. W.
Odell, M. T.—A. A.
Owens, Clifford P.—W. A. E.
Paschal, A.—P. A. A.
Perry, J. A.—E. A. L.
Person, Addison G.—P. A. A.
Potter, Norman W.—U. A. L.
Pursley, C. H.—Panagra
Radoll, R. W.—U. A. L.
Riggs, Russell S.—A. A.
Robbins, Wm. J. B.—A. A.
Rose, John A.—K. L. M.
Rousch, Chas. W.—N. W.
Rust, F. R.—A. A.
Salisbury, Hervey M.—T. W. A.
Sandblom, J. V.—C. P.
Sandegren, Thomas E.—U. A. L.
Sauceda, J. M.—P. A. A.
Scott, P. T. W.—T. W. A.
Scott, Philip C.—U. A. L.
Scroggins, Lowell V.—P. C. A.
Sharpnack, J. W.—U. A. L.
Sheets, Don W.—Panagra
Sherwood, George C.—W. A. E.
Supple, Robert E.—Panagra
Tarrant, Harold R.—U. A. L.
Terletzky, Leo—P. A. A.
*Thomas, L. E.—E. A. L.
Thompson, A. R.—U. A. L.
Underwood, Sanford L.—A. A.
Vance, Claire K.—U. A. L.
Waldron, Joe—A. A.
Walker, M. A.—P. A. A.
Wallace, Clyde W.—T. W. A.
Weatherdon, Edwin—A. A.
West, F. W.—N. W.
Wieselmayer, Otto—P. A. A.
Williamson, P. B.—E. A. L.
Worthen, John A.—W. W.
*Wright, J. S.—T. W. A.
Young, George S.—U. A. L.
Zeier, Carl F.—C. & S. A. L.

Natural

Blomgren, Lloyd I.—A. A.
Cochrane, Robert M.—U. A. L.
Fife, John A.—C. A.
Hohag, R. J.—N. W.
Jamieson, Leland S.—E. A. L.
McConaughey, Ira M.—A. A.
Phelps, Henry T.—P. A. A.
Swanson, Axel—A. A.

Inactive

Anderline, Frank W.; Ashford, Ted; Barr, Julius; Burford, Dean W.; Caldwell, G. Q.; Drayton, Chas. M.; Huisman, Herbert W.; Judy, H. R.; Kerwin, J. J.; Noyes, Dewey L.; Ormsbee, F.; Riddle, Glenn L.; Roulstono, J. J.; Rousch, Usher E.; Shelton, Boyd M.; Stark, Howard C.; Trimble, W. L.; Veblen, E. H.; Walbridge, Donald C.; Wheaton, Harold H.; Whittemore, Fred W.; Wolf, John F.; Willey, Sidney L.

Waiting List

Brock, Wm. S.; Kiser, Daniel.

Unemployed

Darby, James E.; Downs, Lloyd; Hays, George L.; Keadle, Floyd E.; Rhiner, L. H.

Honorary

Greene, Dr. Ralph; Rogers, Will.

* *Apprentice Member.*

—*Washington Eve. Star Photo*

FLYING LAB REEDER G. NICHOLS, CHIEF OF THE RADIO SECTION, AIR CARRIER DIVISION, CIVIL AERONAUTICS AUTHORITY, STRETCHES TO REACH THE SHIELDED, ICE-FREE ANTENNA LOOPS OF A NEW DUAL AUTOMATIC RADIO DIRECTION FINDER INSTALLED IN THE CAA'S NEW TWO-ENGINED FLYING LABORATORY. THE ICE HAZARD HAS LONG BEEN A MENACE TO FLYING. MANY OF THE PROBLEMS IT PRESENTS HAVE BEEN SOLVED, BUT MANY STILL REMAIN. LINE PILOTS ARE HOPING THAT THOSE CARRYING ON THESE EXPERIMENTS FOR THE ELIMINATION OF THE EVER-PRESENT ICE HAZARDS WILL CLING TENACIOUSLY TO THEIR TASK UNTIL IT HAS BEEN PROPERLY ACCOMPLISHED.

Read Allen For Comfort

By LOYD C. WALDORF
Council No. 45, MCA
Kansas City, Mo.

Various reserve captains and first officers who have been affected by reduced schedules due to the lines losing transports to Britain (to say nothing of reserve officers who have been called to active duty from the lines) may find small comfort in the article by C. B. Allen in the July issue of *Western Flying*.

In brief, it states that the Army is at present using over 50 multi-engined aircraft for the main purpose of transporting various Army commanding officers about the country. Not only that, but they are demanding another 120 such planes for assignments of this nature. So apparently the Army is short of chauffeur pilots.

By That Time You Need A Good Forecast

Did you ever get out your maps and attempt to follow the progress of various fronts according to the locations given on CAA weather forecasts? They frequently read something like this, "Weak cold front lying along Hinkelville — Tinker's Creek — Whoozis line will advance to Morton's Junction — Red Butte and Whichville by 6:30 p. m." In the first place, by the time you have located these points, the front has passed both lines and a new one is approaching, so you have to wait for a new forecast.

We will soon have barographs on all the air line planes in the country. It won't be long before the next step will be taken to have a movie camera installed to take pictures at intervals of the instrument panel. If the barograph would only record the reason for a change of altitude it would really be of some help. A downdraft can cause you to lose 1,000 feet under some conditions, but I imagine one could exercise his emergency authority to climb back up—maybe the blame could be placed on the copilot.

Ancient Rule Is Bugaboo

We still encounter the ancient regulation which allows you to fly in dense fog over zero-zero conditions on instruments, yet, if there are no beacon lights on your course, forbids you to fly over the same route with the same facilities in operation, despite it being a perfectly clear night when you can see for 100 miles. There may not be any lighted fields on the course either, but I should like to see you get down to a lighted field in zero-zero conditions.

Have you heard of the pilot who had such a good tail wind that he put his flaps down so the wind could push the plane along faster?

Captain's Life is The Life for Me

By C. G. HOLLIMAN
Council No. 44, DELTA
Atlanta, Ga.

Dear Editor:
I received your letter addressed
"Dear scribe,"
But I read it with haste and put
it aside
For I'm on vacation and having
fun,
And if there's news I can see
none.
But in two more weeks the fog
may rise,
And I'll write something about
twice this size.
But if anything for space is
something you lack,
I'll enclose some stuff I wrote
awhile back.

AIN'T IT THE TRUTH

A captain's life is the life for me,
Flying a machine called the DC-3.
With gadgets here and gadgets
there,
And at fifty instruments you must
stare.
A new first officer and a
stewardess too,
They have their troubles and
duties to do.
The noise and static in your
earphones growl,
The wind and rain has a steady
howl.
It drips down your face and into
your shoes
With the rhythmic drip of the St.
Louis Blues.
The whole ship shaking and
bouncing with a jerk,
But I'd rather be a captain than
a drug store clerk.

COULD BE, COULD BE

Flight 7 passing Columbia
account surface wind,
Flight 6 requesting traffic, flight
2 is coming in,
Flight 22 on instruments at seven
thousand feet;
A teletype a-tapping out a
rhythmic beat.
Then BAM!! comes a clearance
from the ATC,

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Silent As a Southern Grave

By W. L. NOFTSINGER
Council No. 4, TWA
Los Angeles, Calif.

This council has been as silent as a Saturday night in a southern cemetery. So silent, in fact, that the voice of Felix Preeg sounded like that of a ghost when he called a meeting a few weeks ago. All members were present except Ted Hereford, who as usual was studying his navigation lesson somewhere between Balboa and Avalon. However, it was learned that Ted this time was busy checking his copilot, Peterson, on a new method of "De-Icing."

Milo Campbell's explanation of the proper channels that had to be opened, in reference to the Boeing 307-B pay controversy, was heard with interest by all. It is earnestly hoped that this long, drawn out controversy will soon be ended, and that the pilots and copilots will be rewarded amply for their efforts to resell this "over the weather" hallucination to their public.

The Truth Not Within Him

George Rice and Campbell have just about tied for the fishing honors in this council. Both have reported alarming catches of the ever elusive trout this season. Their claims are at least worthy of a toast, so here goes:

Behold the fisherman.
He riseth early in the morning,
He disturbeth the whole house,
He goes forth full of hope,
And when the day is far spent,
He returneth
Smelling of strong drink,
And the truth is not within him.

Indian agents in the vicinity of Albuquerque recently reported that there was a general unrest among the Navajo tribes within their judiciary. The agents claimed that this unrest was so serious that they were afraid the Navajos were again about to take the "Wa-ar" path.

Government officials were appointed to make a study of the situation. One school of thought believed there was a possibility that the Army control tower at the Albuquerque Airport was the cause of the existing condition among the Navajos.

(Continued on Page 6, Col. 1)

Vacation Travel by Plane Will Reach All-Time High in 1941

The greatest influx of vacation travel by plane in the history of air transportation was forecast for the 1941 season today by C. Bedell Monro, President of Pennsylvania-Central Airlines. "The general acceptance of air travel is coupled with the fact that American tourists this year will be vacationing within our own boundaries and in Canada. Already we have had hundreds of inquiries from persons who have never traveled by plane for information about getting to their favorite vacationland," Mr. Monro said.

In preparing for its busiest vacation season in history, Pennsylvania-Central Airlines has increased service on most of its routes. For example, the tourist flying to Washington has ten trips daily to select from on the Detroit-Washington route. For those going to the popular vacation resorts near Norfolk—including Virginia Beach and Old Point Comfort—PCA has three round trips operating daily from Washington.

Larger planes already have been placed on the PCA routes serving the picturesque playgrounds of northern Michigan. The 1941 Douglas Capital Liners, each carrying 21 passengers, fly north of Detroit to Traverse City and Sault Ste. Marie. Soon a stop will be made at Pellston, Mich., to serve a large number of Upper Peninsula resorts. This will greatly accelerate travel time to such popular places as Petoskey, Cheboygan, Harbor Springs, Charlevoix, and Mackinac Island.

15 Contracts

(Continued from Page 1)

gives one side an advantage over the other, and thereby destroys that certain delicate balance that is vitally necessary to good employer-employee relations.

The best way to judge whether an agreement is good or bad is to put it to the acid test of practical application. Pilots' agreements have been subjected to this kind of a test many times and have emerged unscathed.

Braniff Contract Enters Third Year

For example, one of such contracts on Braniff Airways renewed itself on September 1 for the third consecutive year without a change. All must agree that this speaks very well for the original document. Most of the other contracts are now operating in the second year without change.

Transcontinental & Western Air pilots' agreement was rather extensively amended because of the Boeing 307 stratoliner pay question. The American Airlines pilots'

(Continued on Page 5, Col. 5)

Vetoes Stripping

(Continued from Page 1)

available airplanes sent overseas, he did not think commercial aviation should be crippled in the United States.

"I don't think we ought to give Britain any more planes," the Mayor said. "We need our transport planes here, and we need them badly. After all, we've given a great many military planes, and we'll continue to give them. I understand the air lines turned over 12 planes to England the other day, and I've heard they want more.

Wants Air Lines in Top Condition

"I want to see our commercial air lines, our shipping, and our railroads kept up to top condition at all times."

To date the commercial air lines have turned over about 112 transport planes to Britain, leaving fewer than 350 transports of all types for the air lines.

After pointing out the importance of planning for "postwar adjustments," Mayor La Guardia described the new hangar as "New York City's first actual, concrete contribution to the postwar problem."

Part of City's After-War Program

"I really believe that the war may be over not very long after this hangar is completed," the Mayor said. "In fact, it may be over before. My interest in this plane hangar is specifically that it represents a part of our city's after-war program."

American Export Airlines has signed a 40-year lease for a total rental of $1,400,000.

—*And We Present Million-Mile Mooney*

On Western Air Lines' list of senior captains, his name appears as Albert Mooney, Jr., but from end to end of the northern division he is plain Bert Mooney, one of the Company's best-known and best-liked pilots. Recently made Chief Pilot of Division 2, Bert's air log shows a total of 1,450,000 miles, nearly two-thirds of this in commercial air line work. A careful and conscientious pilot, Bert's special interest is in the younger copilots who are being groomed for future flight captains. Off duty, his chief hobbies are fishing and hunting and his home which he shares with a wife and four strapping sons. Not as an exception, but as a typical example of Western Air's flight personnel is Bert Mooney — sportsman, family man, master pilot.

—*Speed Magazine*

After checking weather and load with the dispatcher, Bert makes up his flight plan.

Back in Salt Lake, Bert and his crew, Ed Schuster and Bobbie Felder, call it a day.

At home in Salt Lake City, Bert sorts over his fishing tackle and plans fresh assaults on his secret trout hole.

At the end of his run, Bert usually calls his wife, takes a little good-natured ribbing on this account.

The Mooneys. Left to right: Bert; Brian, 9; Mrs. Mooney; William, 11; Albert, 15; J. Murray, 13.

LATE NEWS

(Continued from Page 1)

Leads

The *American Machinist* magazine recently published figures showing that the United States and Great Britain are producing 32 per cent more airplanes a month than Germany. World production of planes were estimated at around 8,000 a month, as follows: Germany, 2,500; Russia, 2,000; Britain, 1,800; United States, 1,500; and Japan, 300.

Bulletproof

A self-sealing hose designed to make airplane fuel systems completely bulletproof has been developed by the B. F. Goodrich Company. An outgrowth of the Company's development of self-sealing gasoline tanks, the hose will make the entire fuel system of fighter and bomber planes leakproof even under "10 to 15 pounds pressure and despite numerous punctures from high caliber machine gun bullets," the Company said.

Novel

Surveying a jungle from the air and dropping 100-pound bags of powdered lime from a bomber at regularly timed intervals to guide the engineers through the bush were necessary in planning the big new runway for airplanes at Howard Field in the Panama Canal Zone, which has been completed in record time.

Delivery

New equipment, delivered the last two weeks and thus warding off a threatened shortage in domestic operations, was received by American Airlines, United, Eastern, and TWA.

Commuter

After a week as a commuter between La Guardia Field and the Newark Airport, Peter J. Schweitzer would hesitate a long time before returning to the daily ordeal of 60 or 70 miles at the wheel of his car, the bolted breakfast, the enervating cacaphony of auto horns preventing proper digestion, the endless traffic jams, the lack of opportunity to read the morning's news while on the way to work, and the $1.50 in tunnel tolls entailed each day in addition to the operating expenses of his automobile. With the use of a Transcontinental and Western Air travel card, Mr. Schweitzer commutes by air betwen his home and business for $3.40 daily.

Training

A bill now before Congress provides for the training of glider pilots, under the direction of the Civil Aeronautics Administration, and the construction of the planes by the National Youth Administration. As an experiment four planes were constructed this year by NYA boys of ages ranging from 17 to 24. The ships can be made at a cost ranging from $250 to $1,300.

Shortage

Two surveys, one conducted by the Aeronautical Chamber of Commerce and the other by a Government agency, reveal that the shortage of air mechanics will soon become a major crisis of the defense program unless the training of airplane and engine mechanics is speeded up. Eight to ten mechanics per plane are needed, and there are 74,000 military planes on order today. At this rate the shortage of mechanics will run into hundreds of thousands within two years unless something is done about it.

Water Skiing in 5 Uneasy Lessons

By L. A. (RUSTY) HEARD
Council No. 18, EAL
Miami, Fla.

(Editor's Note: From Miami comes this "in five uneasy lessons how to be a successful water skier" glowingly penned by Rusty Heard. To quote the author-instructor "it's just as simple as that, if you know how.")

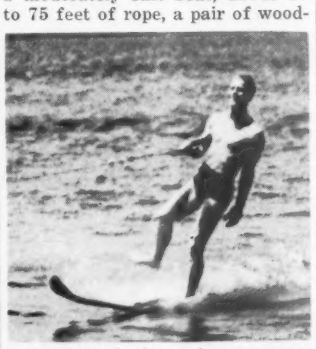
Well, this has been hanging fire for a long time, but after numerous "goings over" by Chairman Diggs and letters from Headquarters I've managed to write a little "epp-pistol." I beg all of you to consider my position as a first writer and bear with me.

Here we have L. A. (Rusty) Heard doing his stuff on a pair of —Oh, yes, we almost forgot, they call them water skis.

To all of you novices and past masters of the art of snow skiing I would tell of a fairly recent addition to the world of sports. In my opinion it is tops. Not only for the thrills derived, but also for the wonderful outdoor exercise there is in it. Namely, water skiing. On these hot, sticky days it's really a lifesaver to get in the water and play.

All You Need Is Rope, Skis, and Yourself

The only equipment needed is a moderately fast boat, about 50 to 75 feet of rope, a pair of wood-



Ah, here he is again up on one foot, the smartie. Remember what we told you about no good coming of this kind of gadding about?

en skis, and yourself. Never having been on snow, I could not positively say that skiing on water is easier, but I believe it is. In my opinion, just as many thrills may be had in water skiing with less possibility of a serious mishap. Fellas who are fairly well experienced at snow skiing claim that, although the principle is the same, it is just like learning all over again.

After a brief description of the equipment suppose we take a try at it. First comes the boat; in this case a little 14-foot Outboard Runabout powered with a 22-horsepower Johnson motor, capable of about 30 miles per hour while pulling a man on skis. To a pull-ring in the stern is attached 50 feet of quarter-inch rope which has a wooden bar tied between the fork at the end.

Our next consideration is the skis. These are made in all sizes, shapes, and forms. A common pair is seven feet long, seven inches wide, and about five-eighths of an inch thick. Some have a gradual taper in the thickness, and the toes are turned upward the same as any skis. As a means of attaching them to your feet there is a rubber flap located slightly back of center that the foot is thrust under, and another flap that fits tightly behind the heel. The rear one is usually adjustable so as to accommodate all sizes of "tootsies." Rubber is the medium used because it permits skis and rider to separate in case of a spill, which is a very frequent occurrence. (And I do mean Frequent with a capital F.)

Just to show you how easy it is, Rusty does it standing on one foot. You can bet your boots no good is going to come of this.

Ideal Sport for the Beginner

Now, if you have a fairly clear idea of the equipment, suppose we use our imagination a little and take a shot at it. We are on a small sandy island in Biscayne Bay that tapers gradually down to the edge of the water. This is an ideal spot for the beginner. Slip your feet in the ski shoes and pick up the handle at the end of the rope. Now walk out into the water where it's four or five inches deep. There, that's far enough. Now put both skis together and sit down on them way back on the end. No, that's not far enough back. The idea is to take all possible weight off of the skis so that the toes will float in the take-off position. The only

(Continued on Page 6, Col. 2)

What do you think of this? He even does the splits with the greatest of ease and without even a sneeze.

Splash! Didn't we tell you so? And another good water skier shakes hands with Father Neptune. Anyway, it must be great fun, and if you would like to try it one day, I'm sure Rusty would oblige and give you every possible assistance to learn to duplicate the pose pictured above.

CAA Assumes Jurisdiction

(Continued from Page 1)

nel.

Officials stated that both Army and Navy were reluctant to control air line and other civil aviation activities, and preferred that CAA be designated the agency to serve as the single traffic control authority. It was thought inappropriate that military flight movements be left under the jurisdiction of local control.

Complete Control of Flight Movements

Under the new system CAA, aided by service officers, will not only have jurisdiction over military and civil aviation on civil airways, but will have complete control of such flight movements into and out of the 39 airports named, where formerly municipal or private personnel were in authority.

In some cases these airports have been leased by the cities to the Army or the Navy and are therefore already within the scope of federal jurisdiction, thus raising no legal question of CAA control as a federal agency.

In other cases, mutual arrangements will be or have been worked out with municipal authorities. For example, CAA officials said at Atlanta, a city-owned airport, the city recommended that the CAA take over.

Supporters of the Nichols bill, now pending in the House (McCarran companion measure in the Senate) see in this development the first step toward eventual complete and continuous control by the Federal Government of air traffic movements without interruption. The Nichols bill, resulting from the House investigation of air line accidents, proposes that CAA have jurisdiction over civil airways not only from field to field, as at present, but from ramp to ramp. Traffic control tower personnel would be federal employees under the Nichols proposal.

Special Training Operation Created

Present personnel at the 39 airports will be transferred to the Administration payroll, and additional traffic control tower operators will be trained by CAA for this activity. The Nichols bill would create a special training operation under the Administrator. CAA airways officials said recently that sufficient trained personnel are available for this immediate project, but admitted that this program would be of great value as a training experiment should the Nichols bill later be enacted. In fact, the limited supply of properly trained traffic control tower operators was cited by CAA as the one reason why adoption of this program has been delayed until now.

Most of the airports are already equipped with towers, but a considerable amount of radio control apparatus, etc., will be required. For example, radio control mechanisms of several different frequencies will be needed since military and Naval craft as well as air line planes will come within the new jurisdiction.

Encouraging Sign of Future

Private flying enthusiasts, as well as commercial aviation circles, received the news of CAA rather than military control as an encouraging sign for the future.

The list of 39 airports shown below may be expected to be expanded, depending upon future expansion of military and Naval flight movements into civil airports.

Control points involved are:

Albuquerque, N. M., Atlanta, Ga., Augusta, Ga., Bangor, Me., Baton Rouge, La., Boise, Ida., Charlotte, N. C., Detroit (Wayne Co.) Mich., Everett, Wash., Fort Wayne, Ind., Fresno, Calif., Houlton, Me., Jackson, Miss.

Jacksonville, Fla., Los Angeles (Mines Field) Calif., Lake Charles, La., Las Vegas, Nev., Little Rock, Ark., Louisville, Ky., Long Beach, Calif., Manchester, N. H., Meridian, Miss., Midland, Tex., Nashville, Tenn., New Orleans, La., Oklahoma City, Okla.

Orlando, Fla., Pendleton, Ore., Presque Isle, Me., Portland, Ore., Salinas, Calif., Savannah, Ga., Salt Lake City, Utah, Tallahassee, Fla., Tusson City, Ariz., Tulsa, Okla., Wichita Falls, Tex., W. Palm Beach, Fla., and Floyd Bennett Field, Brooklyn, N. Y.

SHEEP SEPARATED FROM THE LAMBS

By B. R. EZELL
Council No. 42, Braniff
Dallas, Tex.

Once again the heavy hand has smitten your poor reporter firmly upon the proboscis. Only in this morning's mail came a stern warning from the President that the horrible deadline date hovered in the offing.

All I have to say about this correspondent's job is that on the final day of reckoning, when the sheep are sorted from the lambs, I probably shall pass on to a lesser punishment.

Christian Character Bubbles to Surface

The only item of news from this section to date is that there is no news, which in itself is quite noteworthy. Any time this assorted collection of wolves and wastrels can rock along two months without getting in the papers—it must be the heat. Perhaps the raging temperatures have permitted the true, stalwart Christian character of our council members to bubble to the surface. That will give you some idea of how hot it has been. Of course, that is just a thought.

One little matter that has engrossed the pilot personnel no little is the Army-Navy traffic problem along the airways, and I do mean at night. In fact the stretch from Austin to Corpus Christi on the evening trips leaves the pilot with something of the feeling of a clay pigeon pulled down from the shooting gallery for repainting. Flashing the landing lights verges on fatal folly as it always is interpreted as a challenge to play.

Hestitate to Join Armed Forces in Mid-Air

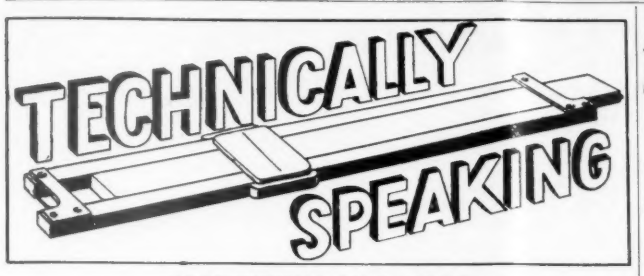
All the boys feel that national defense is a great thing but, like charity, should begin at home. It is most uncomfortable to go tooling along in the cool of the evening with the momentary expectation that some derelick cadet is likely to put the zinger on you and slip you the old whammy. All of us, to a man, are for a bigger and better Air Corps, but some of us are getting a little squeamish about having to join the armed forces in mid-air.

Our projected new run to Chicago seems to be hanging fire. Some of the boys have had the uncertain pleasure of becoming all checked out and having no place to go, except back from where they came. However, Bill Walner did attempt to enliven the proceedings by going around under the treacherous guise of friendly confidence and spreading malicious lies regarding the conduct of some of our more saintly and Christian members. He should stay away from the front of the Wrigley building himself.

Enough Wampum to Sign Mortgages

Cliff Currier has bought a new sailboat. Now he is searching earnestly for a method of bailing out of the boat when only the top of the mast is left sticking out of the water. Don George and George Cheetham fell off the pier and went south with enough of the taxpayers' wampum to sign mortgages for new houses.

But then I guess conditions are bad everywhere. And so, as any fool can plainly see, Council No. 42 has bogged down to a happy, normal summer life of constructive ease and comfort, with which a little flying, now and then, doesn't interfere. And so, with goodness toward all and malice toward none, we regretfully take leave of you all and go to hunt for an old collar button, or something.



OUTWITTING THE WIND

The second and final installment of the story of a new addition to the Link Trainer, compiled by Aeroproducts Manufacturing Company, Kansas City, Mo. The first half of the article appeared in the July issue of the AIR LINE PILOT.

Strong Wind Sometimes Interferes

In the fade-parallel method of orientation, there are several places where strong wind sometimes interferes with orientation. Such is the case if the wind is perpendicular to the initial bisector course when the pilot is attempting to determine his fade or increase. In certain types of range and in certain wind conditions, it is quite possible for the pilot to hear a fade on both his headings toward the station and away from the station as determined by his compass courses.

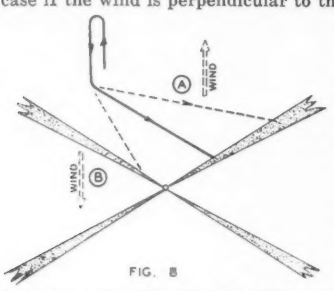
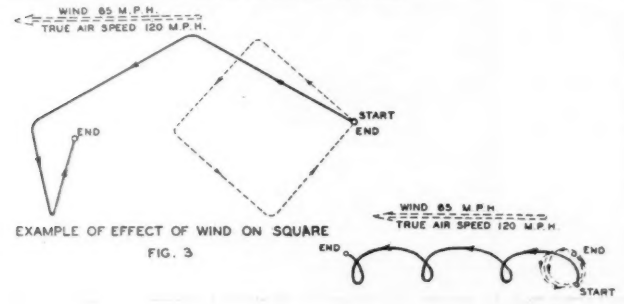


FIG. 8

Another weak point in the fade-parallel method is found when a strong wind is put across the course parallel to the leg which is not intercepted. If this course happens to lie near the leg, a strong wind toward the leg may cause the pilot to drift across the wrong leg, thus confusing him. If the wind is away from the leg, it may cause him to drift well out into the quadrant and require an unreasonably long time to intercept the leg. Nearly all these weaknesses can be overcome by listening to the background signal changes; that is, the ratio of the quadrant N or A to the so-called on-course background. These will tell the pilot if he is going toward or away from the leg, etc.



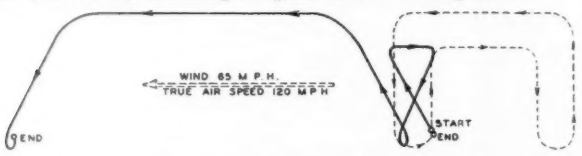
EXAMPLE OF EFFECT OF WIND ON SQUARE

FIG. 3

EXAMPLE OF EFFECT OF WIND ON CIRCLE

FIG. 4

In Fig. 3 are shown the effect of a wind of 65 m.p.h. and a true air speed of 120 m.p.h. on a square. Note the drift downwind. In order to teach dead reckoning the pilot may be required to fly this square correctly, despite the wind which causes him to drift. An interesting example of the effect of wind on a flight is shown in Fig. 4. In this illustration the pilot made a continuous left-hand, standard one-needle-width's turn, as shown by the dotted line. However, he continually drifted downwind, describing the path shown in the figure.



EXAMPLE OF EFFECT OF WIND ON "U" PROBLEM

FIG. 5

Fig. 5 shows the effect of a 65 m.p.h. wind, on a 120 m.p.h. air speed, when the pilot is flying the inverted U problem commonly used in Link Trainer instruction. Note that at no time is the pilot east of his starting point.

Wind Simulator Is Helpful

The teaching of dead reckoning on instruments is greatly facilitated by the Wind Simulator, for this provides an accurate check on the correctness of the pilot's computations and technique. If the pilot is told correctly the direction and velocity of the wind, and allowed to compute the heading and time necessary to fly a given geometric figure or from point to point on a chart, the accuracy with which he completes this figure or flight is a measure of the correctness of his computation.

Another variety of dead reckoning problem is to allow the pilot to start off on a radio range and allow him to hear the range long enough to establish the wind direction and velocity, then to turn off the range, simulating the failure of radio reception, and require him to dead reckon to a point within a given limited distance of another range which is said to be operating. This practice is very useful in training for flying to alternate stations in adverse weather conditions.

Needless to say, any type of problem having to do with head or tail winds and drift angle, such as out-and-back radius of action problem, or the alternate airport problem can be simulated for complete training with the Wind Simulator.

Field for Exhaustive Study

More and more we are recognizing the great advantages of training with correct and automatic continuous simulation of ground speed and drift, in the use of a Link Trainer. The difficulties and problems caused by the introduction of high winds is a field for much exhaustive study and training.

We have attempted to point out some of the various problems that have been brought to our attention, but these examples in no manner are the extent to which the Wind Simulator can be used. As is generally known, J. D. Mountain, Instrument Flight Instructor for Transcontinental & Western Air, did the initial research and engineering on the Wind Machine. It is to him the entire industry is indebted for his development and research on wind effects and methods, and it is through his efforts that the Wind Machine has been worked out to provide safer flying for all.

Associated with the Wind Simulator is a Sperry Loop Direction Finder Simulator. This device provides means for accurately simulating the use of the loop direction finder in aircraft navigation. It is completely automatic and, by it, all the problems commonly done with the loop direction finder may be accomplished and taught.

Usable As Wind Machine or D/F Simulator

The Sperry "Visual Null" type of Direction Finder Simulator is attached to the head of the pen arm on the Wind Simulator in such a manner that the Wind Simulator may be used as a Wind Machine or used as a D/F Simulator together with the Wind Machine in operation or without the simulated winds.

Connected to the simulator device on the Wind Machine is the automatic visual heading indicator, which is located in the cockpit of the trainer, so that the complete operation is exactly as with the Sperry equipment, or any similar type.

Automatically Applied by Wind Machine

The pilot may be taught to take bearings on stations or may home into stations in the ordinary way, either keeping his ship headed on the null or by flying constant courses and setting the drift off as automatically applied by the Wind Machine, thus flying a straight course into the station. The following is one of the many problems taught with the D/F Simulator. We have the pilot home into the station without wind, then home into the station with a cross wind of some magnitude such as 50 m.p.h., first by keeping the ship headed on the null, which will cause the course to change as the station is approached, until the airplane is headed nearly upwind when the station is crossed.

Then we have the pilot home into the station by correcting his course for drift, thus flying an approximately straight course into the station. We suggest that he do this by holding a straight gyro course, starting from a null, from zero on the bearing indicator. Watching which way the needle precesses, he then corrects for the drift by setting a substantial amount, such as 15 or 20 degrees of drift, turning his ship until he gets the null, with the bearing indicator in that position, and then holding his gyro course again. Again he watches the direction of movement of the bearing indicator when a null is maintained and offsets for drift accordingly, but this time only half the amount of his first correction. We have found that in about three corrections a course can thus be established which will be fairly accurate.

Does Not Use Compass

Setting the gyro with the D/F when the compass is lost by means of two-range stations, the pilot does not use the compass as the gyro is caged at the start, and he is put on an unknown heading. The trainer is then turned on, and he homes toward station, setting gyro at O' when he starts toward station and offsetting for any drift he may have in flight. When he gets over the cone of the station, the loop is turned toward another station, with a known bearing from the station being worked. When he gets the null at O', he then sets his gyro to the bearing of the station and works a regular orientation problem, using his gyro. After the problem is completed he checks his gyro with the compass.

The last type of problem which we have been doing with our Direction Finder Simulator is taking cross bearings on two or more stations and plotting a fix from these bearings. This we accomplished by putting on the Link Trainer recorder, a small-scale chart, such as the direction-finder chart, and then not operating the recorder. This, of course, represents an airplane in the air in a fixed position. However, if the pilot takes all three of his bearings within one or two minutes, the movement of the ship on the scale of the chart during that time will be so small as to be negligible.

It's the Only Life for Me

(Continued from Page 3)

While I'm writing out a clearance
for flights 10 and 3.
Six telephone calls a minute about
weather or a flight,
A radio check from number forty,
repeating one on night.
A two-hour mechanical delay on
flight number twenty-three.
Another ship reporting over
Elloree.
Two pilots and a stewardess
talking to and fro.
I can hardly hear at all, and
SLAM!! there goes the doah.
Now I'm on the ragged edge, my
temper hard to hold.
I'm a tried, haggard Dispatcher
of Delta's Flight Control.

VISIBILITY ½ MILE, SMOKE

Knock out your pipe or we'll
all choke,
Sitting on top of a half mile of
smoke.
Wondering if, and wondering
when,
The new regulations will let us in.
I've got to get home, the
passengers say.
Yes, maybe you will, but later
today.
So sit back and enjoy the view,
While I serve more coffee to the
rest of the crew.

Alaska Air Route is Being Established

Bases are being established for an inland flying route for transport planes and bombers between the United States and Alaska on British Columbia territory.

The service represents an important part of the plans of the Canadian and United States Governments for joint defense. Work on the project is being pushed as fast as possible. Prince George, Williams Lake, Fort St. John, Fort Nelson, and Watson Lake are on the route. Runways will be ready for winter use and will be hard-surfaced in the summer of 1942. There will be beam equipment at Prince George, Fort St. John, Fort Nelson, Watson Lake, and Whitehorse.

ALTITUDE AND THE AIRMAN

Sixteenth installment of the article, "Altitude and the Airman," written by Dr. Ross A. McFarland, and abstracted by the late Dr. Ralph Greene. Succeeding installments will appear in following issues.

XIV. METHODS OF FACILITATING EQUALIZATION OF PRESSURE ON EACH SIDE OF THE EARDRUM (Cont'd.)

Sense of Direction Is Lost (Cont'd.)

Airsickness on a passenger plane, however, does not result from these factors. It is caused by the repeated changes in the level of the ship. The air is not a stable medium, and the riding of a ship in the air is similar to that of a ship at sea. Striking a bump in the air causes the ship to rise suddenly or drop suddenly, causing stimulation of the endolymph. Oft repeated stimuli result in vertigo and nausea in the sensitive individual. Airsickness is much more prevalent on gusty, windy days, or on days when there is a sudden drop in temperature. The warm currents rising and the cold currents falling result in a very bumpy medium.

Some individuals are more sensitive than others as far as motion sensing is concerned. If turned 10 times in 20 seconds, the average person will develop a nystagmus (oscillation of the eyeballs) persisting for 23 seconds after the turning has ceased. (Vertigo persists as long as the nystagmus.) We find, however, that some individuals will develop a nystagmus persisting 30 to 40 seconds after the same amount of turning. Such individuals are hypersensitive to motion and are almost invariably nauseated by their vertigo. On the other hand, some individuals have nystagmus which is much slower than the average, and is only 10 to 15 seconds in duration.

Persons with dead labyrinths have no nystagmus; they are, therefore, not disturbed by rapid turning and are not sensitive to motion. The hypersensitive person is usually high-strung and nervous, and this adds a psychological factor to the causation of airsickness. For this reason, diverting the passenger's attention from himself often aids in treating, or in preventing the development of airsickness.

No Relief Until on the Ground

The airsick passenger usually develops a headache first; then he begins to be salivated; then nauseated; and finally he vomits. He may feel better after vomiting, but in severe cases the vomiting recurs, and he has no relief until he is on the ground; often not until he has been on the ground for sometime. If he finds himself becoming dizzy or nauseated, he should not watch the horizon, as this accentuates his consciousness of motion. He should either close his eyes or else fix them on some point within the cabin. A grain or two of anytal and an alkaline effervescent drink is often recommended for such a person. He may then fall asleep and wake up after half an hour or so feeling enough refreshed to enjoy the rest of the trip.

The element of fear must be reduced to a minimum in the passenger making his first flight, and every effort should be made to make him comfortable. He should be warned not to eat heavy or rich food, or indulge in the excessive use of alcohol before a flight, if he is in the least susceptible to motion sickness. Simple food, such as an apple or plain crackers, is tolerated best in the air. Fluids are not recommended, except an alkaline effervescent drink. If a person has a history of train or seasickness, it is advisable to take the first flight on a smooth day. Proper ventilation of the fuselage should be provided, since a stuffy cabin tends to increase airsickness. The lack of oxygen encountered at high altitude also accentuates nausea, and the administration of oxygen is advised under such conditions.

Good Results

(Continued from Page 3)

agreement was likewise quite extensively amended because it was the first to be signed, and naturally considerable streamlining was necessary later. AA's amended agreement was signed on August 1, and the TWA contract was placed into effect only a month earlier on July 31. The TWA employment contract amendment conferences started on July 22, 1940. The pilots were represented by D. M. Medler, M. H. Campbell, P. S. Frederickson, J. O. Eischeid, J. H. Roe, and J. E. Harrington. The Company's spokesmen were L. G. Fritz, Vice-President of Operations; Otis Bryan, System Chief Pilot; and L. M. Reed, Personnel Manager.

The conferences were deadlocked on December 21, 1940; mediation was invoked on December 31, 1940; and an arbitration agreement was signed on April 29, 1941. The arbitration hearing started on June 23 and ended on July 12. A decision was rendered on July 23. Further conferences were held on the unfinished parts of the agreements on August 14, 15 and later.

Amount of Work Rejected

The TWA amended agreement was considered finished by all parties concerned on July 31. This description of the impressive amount of negotiating involved in just one amended agreement reflects some idea of the amount of work involved in Air Line Pilots Association contract making and maintaining program.

While we are on the subject of the amount of work required to make and maintain contracts, let us not forget the tremendous amount of good resulting from such contracts.

In short, the pilots' working agreements have replaced instability and uncertainty in the pilots' working conditions that quite often bordered on utter chaos with working conditions that are, with very rare exceptions, above the average. Surely it is not in the best interests to forget the price that has been paid for all this, and all newcomers should be anxious to learn from the old-timers what it's all about.

Heap Big Indian Stages Blitz

(Continued from Page 3)

Like the Los Angeles City Limits — No Control

Army officials were quick to advise this school of thought that even though the control tower might have been tuned in by some Navajo who was fortunate to have a receiver, the fact that the Navajo knew that the Army's man Roger was on continuous duty would cause rest, and not unrest, among the tribes. They added that not in one single instance had a Navajo squaw been seen wearing an Army blanket on the streets of Albuquerque. Consequently, since the Marine Corps was like the Los Angeles city limits, there was no control over the wearing of the Marine Corps blankets by the squaws. This would have to be taken up with the Bureau of Indignation, within the Navy Department.

The mystery gave way to a solution recently when a Navajo buck turned up at the Hilton Barber Shop and had difficulties telling the barbers that he did not want a haircut, but wanted the hair shaved that was growing by leaps and bounds on his chest. The Navajos threw the Hilton barbers for a loss, until one of the agents happened to be among the customers in the barbershop. A general shakedown resulted among the Indians in the shop, and startling facts were revealed.

Fleas Instead of Happy Hunting Grounds

The Indians claimed that in return for some knowledge regarding the location of a few craters on their reservation they had been given boxes of little black pills by a certain TWA captain. The captain had told them that these little pills would help them find the happy hunting grounds. The Navajos were complaining because they had become the happy hunting grounds for sand fleas that grow and multiply in the mesas around Albuquerque. Furthermore, this captain seemed well informed in the study of mesaology, and he knew all about the fleas.

The identity of this captain remained a mystery until Dutch Holloway was trying to trade trips in order that he could go out and explore some new Navajo information on the location of a few new craters.

Bystanders Want Dutch to Find Craters

It is hoped that Dutch soon will find these craters, and the unrest that has been caused among these Indians will vanish.

Who knows but that some "dayhoff soon" we will read that Captain Holloway has made another discovery of the use of his vitamin pills.

During these times of uncertainty, and particularly if we enter a shooting war, it might be a good idea to blow off the dust from our insurance policies and investigate them for a clause "in case of war." While we are doing this, we might investigate the possibilities of air line pilots getting a policy without the extra premium added on for air line flying.

Facts Back Up Safety of Flying

The following facts recently were published by the Northwest National Insurance Company in a Chicago newspaper:

1. Jaywalking across a busy American street exposes the pedestrian to the same chances of death as if he were in a city undergoing a heavy aerial bombardment for the same length of time.

2. Passengers on a contraband carrying ship in a submarine infested zone take the same chances as passengers riding with an automobile driver who has been drinking. Even a sober driver who keeps his speedometer at 60 miles per hour at night incurs, with his passengers, 20 per cent greater chance of death than student pilots of Army and Navy schools. If the driver has been drinking,

(Continued on Page 7, Col. 3)

Open Sea Cocks—Next Stop Bottom

(Continued from Page 4)

reason that you sit on them at all is to keep from scratching yourself on a rock that might be in the sand.

If the toes are under the water when you start moving, chances are you'll do exactly like a submarine with the "sea cocks" open and wind up on the bottom. (Both yours and the bay's.) You're right now; see how the toes are floating? Okay, we are all set. I start the motor and let it idle away slowly, taking up the slack rope, and you lean away back to keep from being pulled over on your "puss" when the boat jerks you. When all the slack is gone, I open the throttle to pull you up on a plane. There you go sliding through the water, struggling frantically and getting in deeper all the time.

Careful, Hawkins, old boy, old boy. You look like a juggler on a tightrope. Apparently you are on the beam, but indications are that it is about to swing.

Certain Things Just Can't Be Done

Finally you disappear into the water, and your skis come up and float away. Hey! turn loose the rope or you'll wear yourself out before you get started. That's something that just can't be done. Hold onto a rope behind a speeding boat. After you cough up a few gallons of salt water, you then gather up the skis, swim ashore, and try it again. You held the rope too high and didn't lean back far enough. That's very important.

Well, now what do you think of that? What's he going to do, a loop or a wing over? Looks very much as if he had better turn on his automatic pilot—or spin. We venture that he did the latter.

Okay, you've got the rope in your hand, the skis on your feet, and are all set to try again. We start away, slowly as before, and you almost fall over leaning back so far. It turned out to be right, though, because you got off to a fair start, even if you are wobbling all over the place as the boat gains speed. All of a sudden the struggling seems to end, and you find yourself, instead of plowing through the water, skimming over the surface. Here's where you're very apt to experience another difficulty. Whoop! here you fall again, landing on your back and taking on another load of water. (Beats me how much trouble some people will go to just for a little fun.) You readily see what the trouble was that time. As the skis were plowing through the water gaining speed, you had to lean slightly backward against the tug of the boat. But as they came out and started to plane, resistance decreased, and they shot forward and out from under you. Old man Gravity is a tough customer.

This is Charlie Darnes. Note the nonchalant expression. It seemingly makes no difference which way the boat is headed. Just to be obstinate, Charlie heads in the opposite direction.

Here's Charlie again. And he's decided to get back on the beam. Speaking of sport, what could be more perfect? Speeding motorboat, taut line, unruly skis, blue water, and fleecy clouds.

Gliding Begins to Pall, So You Experiment

Well, you feel like you have it licked okay, and you are gliding serenely over the calm bay getting the thrill of your life. This straight sailing seems to grow old all of a sudden, and you decide to experiment. So you attempt to cross the wake of the boat. The wake is only about a foot high with such a small boat as this one. All that is necessary to do to turn is to lift one ski slightly, transferring most of your weight to the ski on the outside of the turn (same as on snow). No trouble doing that, so you decide to go one step further and try jumping the wake. Upon first trial of this you find yourself "flying through the air with the greatest of unease." You make a graceful landing head first, with a follow through of feet and empennage, minus the skis and, as before, taking on still more water in your gullet.

Round the turn we go. How about a little bank and opposite rudder to stop the skid, Walt, or is that the way to do it? What, we don't know anything about it? Certainly not. We're just a bunch of wisecrackers from the sidelines. Oh, you say if we're so smart why don't we try it sometime — sometime is right.

It didn't hurt though; as a matter of fact it was fun. Also you feel that a little salt water might help dilute that "poison" you had the night before. You're not discouraged, even a little, just tired, and will be ready to go again after awhile. You find, after you're back on the beach again, that your back and arms are more tired than anything else. The way to relieve or prevent this is to hold your back straight and straighten out your arms, all the while taking up slack rope by raising or lowering your arms, rather than by pulling them in to your chest and skiing in a crouched position.

Pilot Hawkins Is Expert Performer

While you're resting there on the beach, Pilot W. L. Hawkins will take a few turns around the bay, and you can learn a great deal by watching him. Walt, who has had a bit of experience skiing on snow, had never been on water skis until just a few weeks ago. He now has practically mastered the art and is an enthusiastic follower of it. (At least until he bought a horse?)

Watch him take off. Notice how he stands up so soon as the skis start to move. This reduces drag and allows the boat to gain speed rapidly, pulling him up on a plane almost immediately. That's the way it should be done. He is no sooner going good when he starts cutting didos—jumping the wake, trying to circle the boat (and nearly succeeding), skiing on one ski, putting the rope behind his head, in his teeth, etc. Then he glides gracefully in close to shore and kicks off one ski, continuing on the other. He's a whiz, that boy. After making a turn on one ski, he gets on the outside of the circle that the boat is making to increase his speed; then he turns loose the rope and glides about 100 feet to a one-point landing on the beach. Just as simple as that when you know how.

Miami Gang Boasts of a Number of Experts

There's a number of the Miami gang who can be found out on Biscayne Bay riding the planks in their spare time, and they are fairly good at it too. Among these are Pilots Charlie Darnes (probably one of the best), R. W. (Bob) Whitmore, J. G. (Jerry) McCully (Jerry has only been on them a couple of times, but he does all right), Ray Ruprecht (he cuts a fancy figure), Howard Harris (New Yorker, had one try at it but seemed to enjoy running the boat while someone else skied, so that's what he did mostly), and Harold L. Alford (Al is quite a trickster, and it's hard to keep up with him in his fancy stuff).

Your correspondent has just recuperated from a ski date with him. We both decided to jump the wake of his Chris-Craft at the same time from opposite directions, and you can imagine what happened. Yep, you're right; we ran together while still in the air. Crash is no word for it. The birds were singing while we were trying to locate ourselves in that inky mass cluttered with twinkling stars. If you don't think one H. L. Alford is as hard as nails, you're wrong. Ask the guy who "hit one."

A few bruises and a little skiing lost, but that's to be expected of any good sport. If any of you would be interested in having a try at water skiing, just give this correspondent a blast while you're in Miami, and he will be glad to have your company. Besides that, he needs more pictures. So long.

APLENTY EXCITING

(Continued from Page 2)

of them have cooled off as more exact information of the job has sifted through. There's only one question that I'd like answered. If the job is as attractive as it looks from here, why are there so many pilots back in the states who have resigned from the job?

Council Has 100 Per Cent Attendance

Along with that discussion our council showed a good healthy interest in the protection of maximum number of monthly flying hours. Not all agreed, of course. It's only through lengthy discussions that good ideas are born. But when we have 100 per cent attendance with everyone giving voice to their opinion, then we have a healthy council. As far as any decisions . . . none were reached. I do not believe there was enough information on the subject to warrant any final thought. I'm sure every air line pilot is willing to help out in an emergency, but he must be shown there is a real emergency existing before he risks the working standards which he worked so long to achieve.

A Piece of Land, a Hoe and a Cow

If you've seen Sanford lately you know he's bought a farm. He's talked about it so much that we all know the exact number of steps from the house to the barn. He didn't care where he bought, or what he got, just as long as he had one more acre than Sherman Willard. But don't believe what I tell you. He's really got a good place. Everyone I talk to says, "Now that's the thing today . . . a piece of land, a hoe, and a cow, and let the rest of the world worry." But what about us guys who aren't farmers? I grew up in a bottle factory. Did you ever try selling used bottle caps for a living?

Now Coln is another smart lad. His place is designed for a chicken farm; and he knows all about chickens. He studied about them in school and even carries the rating of veterinarian. But bottle tops . . . I can't feed them to chickens.

What Can a Horse Doctor Do in N. Y.?

There's only one fellow who is as bad off as I am. . . . That's W. W. Mitchell. He's a veterinarian too, but he's in New York. Now what can a horse doctor do in New York?

Jack Swain sent in a special request to advise his out-of-town friends that he was not building a house. He's afraid they'll come live with him and on him. I don't know why he should limit his worrying to the out-of-towners. All of us were planning on moving over.

No such fear has George Apitz, or Borgers, or Garman. They're all in new places, so come on gang.

Vic Miller now places his name plate on the regular trips of AM 23, Ft. Worth to Nashville. Fresh from the duties of Asst. Chief Pilot, he is back on the regular run as regular Captain . . . and a regular guy.

McCarran Asks For Inquiry

Senator Pat McCarran (D., Nev.) has made a new attempt to solve the question of whether the new National Airport at Gravelly Point is in the District of Columbia or Virginia by ordering an immediate inquiry.

R. E. Camalier, recently appointed assistant to the District Committee which McCarran heads, has commenced a thorough search of the laws involved in the boundary dispute.

Particular attention is to be paid to the possibility that the Federal Government can claim immediate jurisdiction without reference to the Virginia legislature, according to reports.

The airport is located on ground dredged from the Potomac.

DISCOVERIES TO REVOLUTIONIZE FLYING

With nearly 900 Weather Bureau stations covering approximately 40,000 miles of airways and 422 teletype stations in the aviation network transmitting hourly reports, the pilots of today's sleek skyliners and military craft receive all the information science has been able to devise to promote safety in flight, according to an announcement by the Department of Commerce.

Despite the great advances made in meteorology in recent years, however, experts of the Weather Bureau and other interested government agencies recognize that there is room for improvement, and that such improvement is necessary to keep pace with the rapid expansion now taking place in military and commercial aviation.

Now 35 Stations

One recognized need is the establishment of many more radio sonde stations for the automatic recording of observations made at stratospheric altitudes, which are of vital importance in determining the presence of icing conditions at flight levels or conditions indicating the probability of sudden severe thunderstorms. At present some 35 radio sonde stations are in operation, each making two observations daily. The need of a denser radio sonde network is generally recognized.

Other devices now receiving a lot of attention include a radio sonde that will float at a given elevation and supply continuous information of changing conditions at that level. Ceiling projectors are not new, but the experts are giving serious study to devising one that will automatically sound an alarm when the cloud-ceiling drops below a certain level.

With new instruments being perfected continually, meteorologists expect television to play an important part in the airways weather service of the future. Some of them even envision the day when complete weather maps may be flashed on a screen in the pilot's cockpit as television develops.

Other possibilities discussed by the experts in the light of recent developments include the evolution of rockets to a point where they can be used to probe conditions much higher into the stratosphere than even the ingenious radio sonde, and, in answer to the dream of most pilots, a method for the clearance of fog from landing fields.

Not Fantasy, But Fact

While these peeps into the future may sound fantastic, Weather Bureau experts point out that the radio sonde would have sounded equally fantastic before Marconi. In fact, if anybody then had predicted the development of these robots, which send weather reports from the stratosphere daily, his sanity doubtless would have been questioned. Yet the radio sonde is an accomplished fact and marks one of the greatest steps forward in meteorology.

Another device only very recently might have been included in the category of things to come. It is a robot weather station that can be installed on a remote island or a mountain top, requiring only periodic servicing, and which automatically transmits by radio a continuous report of weather conditions in its locality. It, too, is a present-day reality and, like the radio sonde, was developed by the National Bureau of Standards in co-operation with the Weather Bureau and the U. S. Navy.

Trusted to Luck

In the early days of aviation, weather information was practically limited to the pilot's judgment of what the weather might be as indicated by local signs. If the weather looked good when a flight was contemplated the pilot took off and trusted to luck as to what kind of weather that might be encountered during the course of his flight or at destination.

Nowadays, before taking off the pilot has complete information of weather conditions along his entire route, as well as information of any conditions that might be expected to move in on his route during flight. He is able—and required—to make a flight plan, indicating his route, flying level, destination, time of departure, and probable time of arrival. Furthermore, this flight plan must also include alternate routes and destinations in the event weather disturbances develop on the original route.

A copy of the flight plan is filed with the air traffic control office. If the pilot does not arrive at his destination at the proper time the traffic control office knows at what other destination he may be expected. Moreover, while en route the pilot is supplied by radio with constant information of changes or new developments in weather conditions which might affect his flight.

Present Relationship Is Reversed

In short, the remarkable development in air transportation in the last two decades is paralleled by the progress of the airways weather service, to which aviation in general is largely indebted. The relation between the two is now quite the reverse of what it was a few years ago. In those days the Weather Bureau relied in large part upon aeronautics for information concerning the state of the upper air. Now, the safety and operations of aviation depend vitally upon the information supplied by the weather service.

Although meteorological science has long recognized the need for a knowledge of conditions in the upper atmosphere to supplement information obtained on the ground, observational difficulties kept that knowledge out of reach to a great extent until near the turn of the present century. The sounding balloon was invented in 1892 and instruments devised which could be carried aloft by it. Shortly thereafter kites were used for the same purpose.

Weather Bureau Founded

In 1917, owing to the development of wartime aviation, Congress appropriated $100,000 "for the establishment and maintenance by the Weather Bureau of additional aerological stations for observing, measuring, and investigating atmospheric phenomena in the aid of aeronautics. . . ." With this authority five stations were added for the observation and study of conditions in the upper air, employing kites, pilot balloons, and sounding balloons.

The following year, 1918, saw what really might be considered the beginning of airway weather service, when forecasts of "flying weather" were inaugurated to assist the fledgling air mail, as well as the War and Navy Departments. With only six stations in the then network of upper air observations, the limitations on these forecasts can readily be understood.

Following a postwar slump not much was done in the way of expansion for the next few years. Along about 1926, however, thanks largely to Government encouragement, air mail and air transportation came to be recognized as established facts. As a consequence, Congress passed the Air Commerce Act, which, among other things, gave the Weather Bureau the responsibility of furnishing the necessary meteorological services to aviation, and authorized it to establish new stations.

Now Accepted Throughout World

Meanwhile, many new discoveries and the adoption of new theories of meteorology had practically revolutionized forecasting methods. Notable among these was the Norwegian "Polar Front" theory, now accepted by meteorologists throughout the world.

In July 1931 the Weather Bureau began the use of airplanes to take its instruments into the upper atmosphere for daily observations. They reached an altitude of some 16,500 feet, bringing back a continuous record of pressure, temperature, and humidity. By 1933, kites had been abandoned entirely. In 1937 there were 29 stations making daily airplane observations. Of these the Weather Bureau had 12, the Army, eight, and the Navy, nine.

Radio Sonde Invaluable.

About this time the radio sonde entered the field of meteorology and again revolutionized the airways weather service, as well as the service to the general public. The balloons carrying the tiny sonde equipment often rise to heights of 15 to 20 miles, sending back automatically a continuous record of baromatic pressure, temperature, and humidity from different altitudes. Just as the airplane supplanted the kite, the radio sonde, with its ability to reach vastly higher altitudes in all conditions of weather, displaced the airplane in observation work.

The teletypewriter, adopted in 1930, is another instrument that has contributed materially to the development of the airways weather service of today, making weather data immediately and simultaneously available to all stations concerned.

Since disturbances may develop anywhere and move in any direction onto the lines between airports, it is necessary to maintain "off-airway" stations to make periodic reports. These, together with the airport stations, form a network from which detailed weather maps are prepared.

Released From Ships Daily

In addition to land stations, the Weather Bureau, in cooperation with the Coast Guard and commercial vessels, has arranged to have observations taken at sea. Radio sondes and pilot balloons are released from ships daily in both the Atlantic and the Pacific.

To provide meteorological advice for transatlantic planes, a forecast center was established at North Beach, N. Y. There forecasts are made for transatlantic flights and meteorological data broadcast to planes in flight over the ocean by means of the Civil Aeronautics Administration radio. Similar stations have been established at Johnston and Palmyra Islands in the Pacific, and a radio range station set up in Hawaii.

The information provided through the teletype network includes the name of the station, ceiling, sky conditions, visibility, precipitation, fog, smoke, dust, etc., wind direction and velocity, temperature, dew point, barometric pressure, altimeter settings, and any important additional information that might affect flight safety. Reports are made hourly, or between the hourly periods whenever abrupt changes in conditions justify them.

Facts Back Safety

(Continued from Page 6)

the chances have been increased 55 times.

3. The housewife who dry-cleans at home with naptha, benzene, or gasoline is subject to twice the death hazard as the student pilot. The man who drives through a stop light takes twice the chances as the woman who cleans with naptha, and about the same chance as a British soldier in a submarine zone.

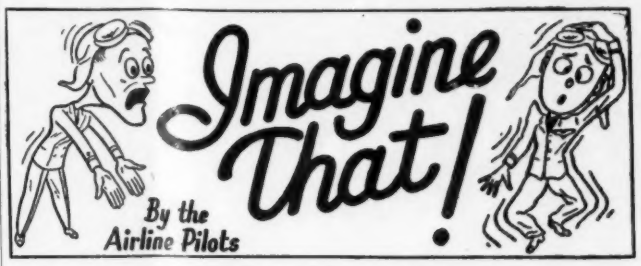
So when the insurance agent complains about the chances that an insurance company takes on an air line pilot, present him with these facts. They indicate that the companies don't even gamble and as a consequence can't loose anything on an air line pilot.

Final Edition from Ex-Jawgy Crackah

(Continued from Page 2)

talent scout, Pilot Chiles. I understand their studio is located in the Peachtree Terrace apartments in Atlanta. I feel sure that any applicants will be received with open arms. Mmmm.

Well, I am writing this during vacation so I ain't going to put any more time on it. Everybody be good, and thanks for holding your tempers so long. This is the last dose.



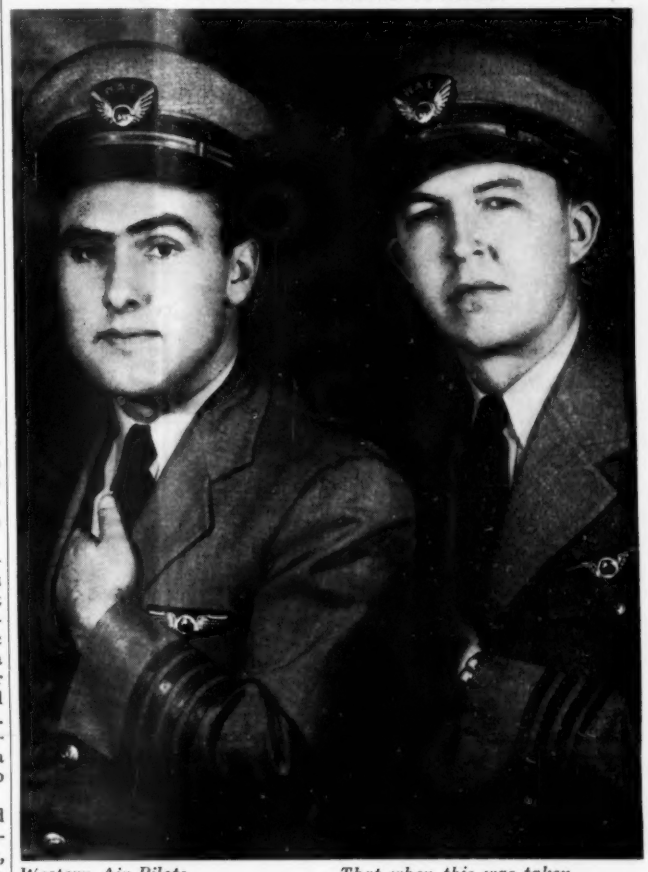
SUPERCHARGED DONKEYS

In La Paz, Bolivia, which is 13,403 feet high, the Indians cut the holes in the noses of their donkeys bigger so they can get more air. Skipper Jim Farris commented, "I don't think it does any good and only disfigures the donkeys."

—Thanks to Jim Farris, EAL

* * *

KNIGHTS IN SHINING ARMOR



Western Air Pilots
So true and bold,
Eaker and Mackenzie
So we are told.

None but the best
Misfits that they be,
Knights in shining armor
As you all can see.

That glassy eyed stare
Leaves no room for doubt,
That when this was taken
They had a full ———.

For shame to belittle
Such stalwarts as these,
For we all know John Public,
On their heads, places wreaths.

Fair weather or foul
Fly they will do,
History's in the making
When they hit the blue.

—Thanks to Lane W. Smith

* * *

GROUPING MAKES THE DIFFERENCE

A middle-aged married couple was strolling through the park one evening when, suddenly, the better half caught the eyes of her subordinate wandering a bit. The usual sharp exchange ensued and, finally, the wife said, "What has she got—I mean that hussy you were looking at—that I haven't got?"

"Nothing, absolutely nothing," meekly replied the husband, *"only she groups it much better."* Next . . . the deep silence of the still night air was pierced with the shrieking siren of an emergency ambulance.

MORAL—It isn't always a good policy to say what you think.

* * *

HOW'S THIS FOR DISHING OUT THE LOW-DOWN?

Present conditions calling for so many young fellows to train for the U. S. Army Air Corps bring back recollections of the first World War. In 1918 the following inquiring letter was written:

Mr. General Headquarters
U. S. Armory
George Washington, D. C.

Dear Mr. Headquarters:

My husband was induced into the surface long months ago and I ain't received no pay from him since he was gone. Please send me my elopement, as I have fore months old baby and he is my only support, and I need it every day to buy food and keep us enclosed.

I am a poor woman and both sides of my parents are very old and I can't suspect nothing from them. My mother has been in bed thirteen months with one doctor and she won't take another. Neether would I. My husband is sergeant of a spitoon.

Please tell me if my husband filled out application for a wife and child. I already wrote Mr. Wilson and if you and him don't answer, I'll write Uncle Sam, as he looks like a nice feller.

Yours very trooly,
MRS. ABRAHAM HIRKOVITZ.

* * *

IT'S EVER THUS

A married man was asked the nation's most famous question: "Are you the boss of your own home?"

He answered: "Well, now it's like this. My wife, Martha, has the final say in all the little problems that come up from day to day, and I, well, I have the final decision in all the big, important matters—but woe unto me, alas, and a couple of alases, nothing ever comes up that the wife considers really big and important."

New Innovation—Magnetic Markings for Runways

An idea can be gained of how this new CAA system of marking runways according to the new magnetic bearing system appears in actual operation. To illustrate how this new method works, if the runway lies east and west, the east end would be numbered 27, representing the compass course (270 degrees) which the pilot would follow in making a landing from east to west; conversely, the west end would be numbered 9, representing 90 degrees. If the runway lies north and south, it would be numbered 18 at the north end and and 36 at the south end. Under this system, the pilot receiving landing instructions by radio is immediately given (within 5 degrees) the compass direction he should follow in approaching the airport in order to land straight ahead.

—CAA Photos

Airports having four runways, or fewer, can be marked without using more than one digit on the end of each runway, which permits the installation of a much larger digit than would be possible if two digits were required. A two-digit marker will, of course, be more difficult to read from the air than a marker composed of one digit. At the 1940 convention of the Air Line Pilots Association, the following resolution was passed—"Resolved That: Runways shall be numbered to conform to magnetic compass headings by dropping the zero, runway 27 numbering an east-west runway for west landing, runway 36 for north, number 9 for east, etc., the number to be placed on the approach end of the runway. (This system to be adopted nationally so that a uniform method will be in use all over the country.)"

C&S Has Record Seven Months

Chicago and Southern Air Lines carried 41.27 per cent more revenue passengers during the first seven months of 1941 as compared with the same period in 1940, according to a recent announcement.

"While business has increased from year to year, the extraordinary volume during 1941 is attributed to the number of people who are traveling on National Defense business." In making this statement, D. D. Walker, Vice-President and General Sales Manager, commented that Chicago and Southern flew 11,919,374 revenue passenger miles during the first seven months of 1941, an increase of 54.75 per cent over the corresponding 1940 period when the air line flew 7,702,367 revenue passenger miles.

U.S.-Canadian Airways on New Map

The airways of the United States and Canada, long the closest of collaborators, appear on a new map entitled, "Civil Airways of the United States and Canada."

This mutual agreement to consider grouping the 4,165 miles of the Canadian system with the 36,375 miles of the U. S. system has been made possible by the redesignation and renumbering of airways on both sides of the border. Thus the Canadian transcontinental route is Airway No. 1 of the new setup, and our transcontinentals, reading from north to south, are Nos. 2, 3, 4, 5, and 6. Canada also has adopted our method of designating airways by colors, as a part of the basic system of airway traffic control.

Nine New Traffic Centers

As soon as possible after July 1 all civil airways of the country will be placed within the control of Airway Traffic Control centers. This will mean the establishment of nine more traffic centers at Boston, Jacksonville, Memphis, San Antonio, Kansas City, Albuquerque, Denver, Minneapolis, and either Butte or Great Falls. These centers, added to the 14 already in operation, will bring the whole system under a unified control.

Main transcontinental routes are designated green airways, and main north and south airways are amber. Secondary transcontinental routes are red, and secondary north and south are blue. For control of traffic under conditions of instrument flying, the green airway traffic has right of way, or priority. Amber airway traffic gives way to green; red traffic gives way to amber and green; and blue gives way to all others. Eastbound traffic flies at odd thousand foot levels, westbound at even; northbound at odd, and southbound at even.

Priority means that when a pilot flying an amber airway desires to cross a green airway, for example, he ascends 500 feet from his required altitude in making the crossing. Since the pilot on the green airway maintains his altitude steadily, they are thus separated by 500 feet in altitude. Airways are 20 miles wide, and pilots must cross at an angle of not less than 45 degrees.

Minor Changes Are Made

Many minor changes have been made in the airway system coincident with the inclusion of the Canadian system. These are necessitated periodically by the realignment of the courses laid down by radio ranges, installation of additional radio facilities, changing conditions along the airways, such as increased military flying, bombing, or gunnery in a given area, and permission by the CAA for instrument flying over new sections of existing routes.

Civil Air Regulations — Legislation
Additions - Changes - Amendments

REGULATION No. 175: AMENDMENT No. 123 TO CAR:
ADOPTED AUGUST 1, 1941,
EFFECTIVE AUGUST 15, 1941.

Control Airport Designations:

This amends Section 60.21 by adding the Youngstown Municipal Airport to the list of control airports. In addition, it changes the name "Washington Airport" which is on this list to "Washington National Airport."

REGULATION No. 176: AMENDMENT No. 124 TO CAR:
ADOPTED AUGUST 1, 1941,
EFFECTIVE AUGUST 15, 1941.

Control Zones of Intersection Designation:

Section 60.2415 is amended by striking the words "Buffalo, N. Y." and inserting in lieu thereof "U. S.-Canadian Border" so as to read as follows:

"60.2415—Amber civil airway No. 6 airway traffic control areas (Jacksonville, Fla., to U. S.-Canadian Border). Those portions of amber civil airway No. 6: From a line extended at right angles across such airway through a point on the center line thereof 25 miles northwest of the Alma, Ga., radio range station, to the U. S.-Canadian Border."

REGULATION No. 178: AMENDMENT No. 125 TO CAR:
ADOPTED AUGUST 5, 1941,
EFFECTIVE OCTOBER 1, 1941.

Private Pilot Aeronautical Knowledge:

This amends Section 20.125 by adding at the end the words "and the general servicing and operation of aircraft" so as to read as follows:

"20.125—Aeronautical Knowledge. Applicant shall be familiar with and accomplish satisfactorily a written examination covering so much of the provisions of Parts 01, 20 and 60 as are pertinent to his certificate, prevailing weather conditions in the United States as encountered in flying, and the forecasting thereof, the analyzing of weather maps and sequence reports as furnished by the United States Weather Bureau, practical air navigation problems and the use of maps, navigation by terrain (pilotage) and by dead reckoning including the use of instruments and other aids to navigation in visual contact flying, and the general servicing and operation of aircraft."

REGULATION No. 179: AMENDMENT No. 126 TO CAR:
ADOPTED AUGUST 5, 1941,
EFFECTIVE AUGUST 5, 1941.

Certificates of Pilots Absent from the U. S.:

This amends Part 20 by the addition of a new section as follows:

"20.7—Absentee pilot certificates.

20.70—Duration. Notwithstanding any other provision of this Part, a pilot certificate, the holder of which is absent from the United States for the 45 days immediately preceding the termination of the endorsement period designated on the certificate, may be continued in effect thereafter without an endorsement by an inspector of the Administrator upon conformance with the provisions of this section, except that such certificate shall, in all cases, immediately expire upon the return of the holder to the United States.

20.700—Such certificate shall continue in effect for a period of 12 months from the termination of the endorsement period if the holder thereof, within the 45-day period preceding such termination, shall mail, or there shall have been received by the Administrator:

(1) A statement of the holder certifying that he has logged 15 hours of solo flight time within the 12 months preceding the termination of the endorsement period in aircraft of the type which he was rated to pilot; and

(2) A statement by a person, who is authorized by the Government of the country wherein the holder is temporarily residing to give pilot physical examinations to nationals of that country, certifying that the holder has satisfactorily passed the physical examination prescribed by that country for pilots of equivalent grade within the 90 days preceding the termination of the endorsement period.

20.701—A pilot certificate continued in effect in accordance with Section 20.700 may be continued in effect for additional periods of 12 months each, if the holder thereof, within 45 days preceding the termination of each period, shall mail, or there shall have been received by the Administrator, the statements prescribed in Section 20.700.

20.71—Special issuance of Expired certificates of absentee pilots.

20.710—Upon return of pilot to the United States. The holder of an expired pilot certificate which has been continued in accordance with the provisions of this section upon his return to the United States, may obtain a new certificate of the same grade and ratings previously held if within 90 days of such return he makes application to an inspector of the Administrator and shows that, within the 12 months immediately preceding the date of such application, he has logged 15 hours of solo flight time in aircraft of the type which he was rated to pilot, and that, within 60 days preceding the date of application, he has satisfactorily accomplished the physical examination required for endorsement of his certificate: Provided, however, no certificate shall be issued if such person has been absent from the United States for a period of more than one year until he has satisfactorily accomplished a written examination on the provisions of the Civil Air Regulations which may be pertinent to the certificate and ratings applied for: And provided further, that no new certificate of limited commercial grade shall be issued on or after May 1, 1942.

20.711—Pilots within the United States. The holder of an expired pilot certificate which has expired since August 1, 1939, because of his failure to obtain an endorsement by an inspector of the Administrator due to his absence from the United States during the period in which such endorsement could have been obtained, and who has since returned to the United States, may obtain a new pilot certificate of the same grade and ratings previously held if he makes application to an inspector of the Administrator prior to November 1, 1941, and shows that he has logged the flight time and has passed the examinations required in Section 20.710.

20.712—Pilots absent from the United States. The holder of a pilot certificate which has expired since August 1, 1939, or which may expire before February 1, 1942, who is absent from the United States, and whose certificate has expired because of his failure to obtain an endorsement by an inspector of the Administrator due to his absence from the United States during the period in which such endorsement could have been obtained, may obtain a new pilot certificate of the same grade and ratings previously held by mailing, or upon receipt by the Administrator, prior to February 1, 1942:

(1) A statement of the pilot certifying that during the 12 months immediately preceding the date of such statement he has logged 15 hours of solo flight time in aircraft of the type which he was rated to pilot; and

(2) A statement by a person, who is authorized by the government of the country wherein the holder is temporarily residing to give pilot physical examinations to nationals of that country, certifying that the holder has satisfactorily passed the physical examination prescribed by the regulations of that country for pilots of equivalent grade. This certificate shall continue in effect for a period of 12 months from the date of issuance and may be continued in effect thereafter for additional 12-month periods if the holder remains continuously absent from the United States and, within the 45 days preceding the termination of each period, shall mail, or there shall have been received by the Administrator, the statements required in this subsection, except that such certificate shall immediately expire upon the return of the holder to the United States."